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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/521,862	01/21/2005	Paulus Cornelis Neervoort	NL 020772	1298
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EXAMINER				
HOEL, MATTHEW D				
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3714				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/521,862

Applicant(s)

NEERVOORT ET AL.

Examiner

Matthew D. Hoel

Art Unit

3714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 July 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SI/02)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 1 to 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kagan, et al. (U.S. patent 5,618,045 A) in view of Sharma (U.S. patent 6,287,200 B1).

1. As to Claim 1: Kagan discloses all of the limitations of Claim 1, but lacks specificity as to the competition-related information depending on the physical locations of the modular units relative to each other. Kagan teaches a method of performing a competition between teams by means of at least two sets of modular units (Abst., Fig. 9, the method comprising acts of connecting a first set of modular units to a second set of modular units, wherein each set comprises at least one modular unit (player can play on a team, 5:1-14; as in basketball game of Fig. 2, 4:32-42); determining which first

modular unit in the first set is connected to which second modular unit or units in the first set (player can select which team to join, such as a first team, 4:23-32, 5:1-7,34-41); determining which third modular unit in the second set is connected to which fourth modular unit or units in the second set (a second player can join the same or an opposite team, 4:23-32, 5:1-7,34-41); determining a set of information items for at least one modular unit, wherein each information item individually relates to a specific modular unit in said sets (unique identifier for each device, 5:67-6:6); and wherein said set of information items represents competition-related information (ID used to join game, 5:67-6:7; and subsequently join a team, 5:1-13), and wherein said set of information items comprises connection-related information indicating locations of said modular units relative to one another as interconnected in a common game space (players moves in virtual basketball court space are broadcast to other players in ad-hoc network, 7:1-11; represented on screen 26 of each respective gaming device, Fig. 2, 4:33-51. The player's moves in virtual space are presented to the other modular units in the ad-hoc wireless network (players moves in virtual basketball court space are broadcast to other players in ad-hoc network, 7:1-11; represented on screen 26 of each respective gaming device, Fig. 2, 4:33-51); the examiner believes it would be obvious to correlate this to player's actual positions in physical space for the following reasons. Sharma, however, discloses the competition-related information depending on the physical locations of the modular units relative to each other (plural wireless gaming devices within radio range of each other, Abst., Fig. 1, 2:53-3:8). The information is competition-related as the users are able to play on teams in virtual volleyball games

against each other (3:30-38). Each mobile user has the coordinates or relative location of each other user (Fig. 2, 3:9-24). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have applied the competition-related location information of Sharma to the gaming system of Kagan. Kagan and Sharma both are virtual games that involve ad-hoc groups of wirelessly connected mobile devices (Kagan, Abst., 1:50-63; Sharma, Abst., ad-hoc in sense that to start a game, a modular unit must detect other modular units within radio range, 2:24-44). Kagan is intended to have the devices communicate using short-range radio communication (3:50-42); Sharma uses short-range radio communication in the form of Bluetooth (2:18-20). The short range of 1 to 10 meters (2:20-22) necessitates the direct correspondence of actual to virtual position as this will be about the size of an actual volleyball court. Kagan simulates a team sports game in which players are able to hand off the ball to one another (basketball, 4:32-42). Sharma similarly simulates an analogous team sport in which players are able to set or pass the ball to one another (volleyball, 3:30-38). The advantage of Sharma's mode of operation as applied to the game of Kagan is that Sharma's spatial arrangement of characters in virtual space corresponding to the player's positions in real space would serve to make the game more realistic, as the players' positions would make it readily apparent to each other which other players would be able to receive a set or passed ball (Fig. 5, 3:45-61; players' actual motions same as their virtual motions, 3:62-65). This would serve to make the game more spatially realistic and easier to learn.

2. As to Claim 5: Kagan teaches a computer system for performing a competition between teams by means of at least two sets of modular units (Abst., Fig. 1, 3:41-53), said computer system comprising means for connecting a first set of modular units to a second set of modular units (wireless LANs in Para. 63 and local handshake protocols for direct connections between devices in Para. 59 of applicants' specification equivalent structure to wireless ad-hoc communications of Kagan, Figs. 1 & 3, 3:41-53, 4:23-32, 5:32-56), wherein each set comprises at least one modular unit (player can play on a team, 5:1-14; as in basketball game of Fig. 2, 4:32-42); means for determining which modular unit is connected to which second modular unit or units in the first and the second set (player can select which team to join, such as a first team, 4:23-32, 5:1-7,34-41); means for determining a set of information items, wherein each information item individually relates to a specific modular unit in said sets (a second player can join the same or an opposite team, 4:23-32, 5:1-7,34-41); and wherein said set of information items represents competition-related information, and wherein said set of information items comprises connection-related information indicating locations of said modular units relative to one another as interconnected in said sets in a common game space (ID used to join game, 5:67-6:7; and subsequently join a team, 5:1-13); means for distributing the set of information items to the corresponding modular units in said sets (players moves in virtual basketball court space are broadcast to other players in ad-hoc network, 7:1-11; represented on screen 26 of each respective gaming device, Fig. 2, 4:33-51. The examiner notes that the claim language does not require the actual positions of the players to correspond to the relative positions of their respective virtual

players in virtual space); and means for presenting one of said information items (players moves in virtual basketball court space are broadcast to other players in ad-hoc network, 7:1-11; represented on screen 26 of each respective gaming device, Fig. 2, 4:33-51). The new limitations of Claim 5 are addressed in the rejection of independent Claim 1 above.

3. As to Claim 6: Kagan teaches a computer-executable code stored on a computer-readable medium (gaming devices of Kagan will inherently have memory with the game programmed into it, evidenced by U.S. patent 5,428,528 A, Figs. 2 & 3, 3:53-4:2, 4:6-24) for performing a competition between teams by means of at least two sets of modular units (player can play on a team, 5:1-14; as in basketball game of Fig. 2, 4:32-42), said code when executed by a computer, executes acts of connecting a first set of modular units to a second set of modular units, wherein each set comprises at least one modular unit (player can play on a team, 5:1-14; as in basketball game of Fig. 2, 4:32-42); determining which first modular unit in the first set is connected to which second modular unit or units in the first set (player can select which team to join, such as a first team, 4:23-32, 5:1-7,34-41); determining which third modular unit in the second set is connected to which fourth modular unit or units in the second set (a second player can join the same or an opposite team, 4:23-32, 5:1-7,34-41); determining for a set of information items at least one modular unit (unique identifier for each device, 5:67-6:6), wherein each information item individually relates to a specific modular unit in said sets; and wherein said set of information items represents competition-related information (ID used to join game, 5:67-6:7; and subsequently join a

team, 5:1-13), and wherein said set of information items comprises connection-related information indicating locations of said modular units relative to one another as interconnected in a common playfield (players moves in virtual basketball court space are broadcast to other players in ad-hoc network, 7:1-11; represented on screen 26 of each respective gaming device, Fig. 2, 4:33-51. The examiner notes that the claim language does not require the actual positions of the players to correspond to the relative positions of their respective virtual players in virtual space); distributing the set of information items to the corresponding modular units; and presenting said set of information items on the modular units (players moves in virtual basketball court space are broadcast to other players in ad-hoc network, 7:1-11; represented on screen 26 of each respective gaming device, Fig. 2, 4:33-51). The new limitations of Claim 6 are addressed in the rejection of independent Claim 1 above.

4. As to Claim 7: Kagan teaches a modular unit for performing a competition between teams by means of at least two sets of modular units (Abst., Fig. 1, 3:41-53), said modular unit comprising means for connecting a first set of modular units to a second set of modular units, wherein each set comprises at least one modular unit (player can play on a team, 5:1-14; as in basketball game of Fig. 2, 4:32-42; wireless LANs in Para. 63 and local handshake protocols for direct connections between devices in Para. 59 of applicants' specification equivalent structure to wireless ad-hoc communications of Kagan, Figs. 1 & 3, 3:41-53, 4:23-32, 5:32-56); means for determining which modular unit is connected to which second modular unit or units in the first and the second set (player can select which team to join, such as a first team,

4:23-32, 5:1-7,34-41; a second player can join the same or an opposite team, 4:23-32, 5:1-7,34-41);

means for determining a set of information items, wherein each information item individually relates to a specific modular unit in said sets (ID used to join game, 5:67-6:7; and subsequently join a team, 5:1-13); and wherein said set of information items represents competition-related information, and wherein said set of information items comprises connection-related information indicating locations of said modular units are located relative to one another as interconnected in said sets in a common game space (players moves in virtual basketball court space are broadcast to other players in ad-hoc network, 7:1-11; represented on screen 26 of each respective gaming device, Fig. 2, 4:33-51. The examiner notes that the claim language does not require the actual positions of the players to correspond to the relative positions of their respective virtual players in virtual space); means for distributing the set of information items to the corresponding modular units in said sets; and means for presenting one of said information items (players moves in virtual basketball court space are broadcast to other players in ad-hoc network, 7:1-11; represented on screen 26 of each respective gaming device, Fig. 2, 4:33-51). The new limitations of Claim 7 are addressed in the rejection of independent Claim 1 above.

5. As to Claims 2, 8, 10, 12, 14, and 16: Kagan teaches receiving a first information item representing a property of a modular unit or each modular unit (each unit has a unique identifier, 5:67-6:6; each unit also has a team assignment, 4:23-32, 5:1-14,34-41). Sharma sets the competition-related item based on the received first information

and based on the physical location of the modular unit relative to the other units (3:9-24). The locations of the modular units relative to one another define a common game space (Sharma, 3:9-24, Fig. 5, 45-61).

6. As to Claims 3, 9, 11, 13, 15, and 17: A Kagan teaches receiving a second information item representing a first competition or a second competition (plural games as game sessions can begin and end, 5:-33-41; another player can elect to join or not to join any given game, 6:25-40; up to fifteen players can be accommodated, 6:54-59, so in the event of 10 players in a five-on-five basketball game, the game would round out five additional players for a second game, 5:1-14). Sharma sets the competition-related information based on the received second information item and the physical location of the modular unit relative to the other modular units (3:9-24). The locations of the modular units relative to one another define a common game space (Sharma, 3:9-24, Fig. 5, 45-61).

7. As to Claim 4: Kagan teaches disconnecting a third set of modular units from the first and second set of modular units, wherein said third set comprises at least one modular unit; and connecting a fourth set of modular units to said first and second set of modular units, wherein said fourth set comprises at least one modular unit (player can select which team to join, such as a first team, 4:23-32, 5:1-7,34-41; a second player can join the same or an opposite team, 4:23-32, 5:1-7,34-41; players can join or leave a game at any time, 5:33-41). Sharma sets the competition-related information based on the received second information item and the physical location of the modular unit relative to the other modular units (3:9-24).

Response to Arguments

8. Applicant's arguments with respect to claims 1 to 17 have been considered but are moot in view of the new ground(s) of rejection. In Kagan, the player's moves in virtual space are presented to the other modular units in the ad-hoc wireless network (players moves in virtual basketball court space are broadcast to other players in ad-hoc network, 7:1-11; represented on screen 26 of each respective gaming device, Fig. 2, 4:33-51); the examiner believes it would be obvious to correlate this to player's actual positions in physical space for the following reasons. Sharma discloses the competition-related information depending on the physical locations of the modular units relative to each other (plural wireless gaming devices within radio range of each other, Abst., Fig. 1, 2:53-3:8). The information is competition-related as the users are able to play on teams in virtual volleyball games against each other (3:30-38). Each mobile user has the coordinates or relative location of each other user (Fig. 2, 3:9-24). Kagan and Sharma both are virtual games that involve ad-hoc groups of wirelessly connected mobile devices (Kagan, Abst., 1:50-63; Sharma, Abst., ad-hoc in sense that to start a game, a modular unit must detect other modular units within radio range, 2:24-44). Kagan is intended to have the devices communicate using short-range radio communication (3:50-42); Sharma uses short-range radio communication in the form of Bluetooth (2:18-20). The short range of 1 to 10 meters (2:20-22) necessitates the direct correspondence of actual to virtual position as this will be about the size of an actual volleyball court. Kagan simulates a team sports game in which players are able to hand

off the ball to one another (basketball, 4:32-42). Sharma similarly simulates an analogous team sport in which players are able to set or pass the ball to one another (volleyball, 3:30-38). Sharma's mode of operation as applied to the game of Kagan is that Sharma's spatial arrangement of characters in virtual space corresponding to the player's positions in real space would serve to make the game more realistic, as the players' positions would make it readily apparent to each other which other players would be able to receive a set or passed ball (Fig. 5, 3:45-61; players' actual motions same as their virtual motions, 3:62-65). The examiner respectfully disagrees with the applicants as to the claims' condition for allowance.

Citation of Pertinent Prior Art

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Meyers, et al. in U.S. patent 6,674,995 B1 teach passing a virtual ball from one wireless modular device to another; opposing players can even block the passing of the virtual ball from one team member to another by physically getting in the way of transmission (3:65-67).

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew D. Hoel whose telephone number is (571) 272-5961. The examiner can normally be reached on Mon. to Fri., 8:00 A.M. to 4:30 P.M.

11. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on (571) 272-4690. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

12. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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